

CLAIMS

1. (Withdrawn) An adaptive method for selecting the scheduling scheme to be used with respect to a given mobile station, the method comprising the steps of:

determining if the given mobile station is not in soft-handoff;

utilizing explicit scheduling of the reverse link communications from the given mobile station if the mobile station is not in soft-handoff;

determining if the given mobile station is in soft-handoff; and

utilizing congestion control scheduling of reverse link communications from the given mobile station if the mobile station is not in soft-handoff.

2. (Withdrawn) An adaptive method for selecting the scheduling scheme to be used with respect to a given mobile station, the method comprising the steps of:

determining if the given mobile station is not in soft handoff;

utilizing explicit scheduling of reverse link communications from the given mobile station if the mobile station is not in soft-handoff;

determining if the given mobile station is in soft-handoff;

utilizing congestion control scheduling of reverse link communications from the given mobile station if the mobile station is in soft-handoff; and

if the mobile station is in soft hand-off, transmitting by the MS over the reverse link channel at the lowest of the reverse link data rates extracted from the plurality of congestion control commands received by the mobile station.

3. (Currently Amended) A base station controller (BSC), comprising:

an active set generator; and

a reduced active set generator, wherein the reduced active set generator employs output of the active set generator, and wherein the BSC is configured to send indicia of the reduced active set to at least one Base Transceiver Station (BTS) and wherein each BTS of the reduced active set transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS.

4. (Original) The BSC of Claim 3, wherein the reduced set generator employs reverse link and forward link channel signal strength to determine members of the reduced active set.

5. (Original) The BSC of Claim 3, wherein the BSC is configured to send indicia of the reduced active set to a BTS.

6. (Original) The BSC of Claim 3, wherein the active set generator employs measurements of at least one pilot channel energy strength.

7. (Original) The BSC of Claim 3, wherein the BSC commands an RDCCCH channel to be used if the number of entries in the reduced active set is greater than one.

8. (Currently Amended) The BSC of Claim 3, wherein the BSC commands a[n] reverse shared channel assignment channel (RSCACH) channel to be used if the number of entries in the reduced active set is equal to one.

9. (Currently Amended) A[n] Mobile Station (MS), comprising:
means for extracting information employable to determine a set of members of an active set;
means for extracting information employable to determine a set of members of a reduced active set; and
means for receiving a plurality of explicit data rate mode channels for a reverse link;
means for receiving control information from each member of the reduced active set over a RDCCCH if the reduced active set comprises more than one member; and
means for selecting a congestion control scheduling mode if the number of members of the reduced active set comprises more than one member are two or more.

10. (Original) The MS of Claim 9, further comprising means for selecting an explicit scheduling mode if the number of members of the reduced active set is equal to one.

11. (Original) The MS of Claim 9, further comprising means for selecting a congestion control mode if the number of members in the reduced active set is equal to one.

12. (Original) The MS of Claim 9, further comprising means for receiving a plurality of explicit data rate mode channels.

13. (Original) The MS of Claim 12, further comprising means for selecting one of a plurality of explicit data rate mode channels.

14. (Original) The MS of Claim 10, wherein the MS is configured to extract a reverse link channel data rate from the explicit control data rate channel.

15. (Original) The MS of Claim 11, wherein the MS is configured to extract reverse link channel data rate from the congestion control data rate channel.

16. (Currently Amended) The MS of Claim 15, configured to transmit over a reverse link at the lower of the two data rates extracted from a plurality of congestion control channels.

17. (Currently Amended) A method for dynamically switching between explicit reverse link channel data rate control and reverse link channel data rate congestion control, comprising:

generating a reduced active set;

transmitting indicia of the reduced active set to an MS; and

if the number of members of the reduced active set is greater than one, transmitting reverse link channel data rate control information in congestion control mode from each member of the reduced active set.

18. (Original) The method of Claim 17, wherein the step of generating a reduced active set employs the members of an active set.

19. (Original) The method of Claim 17, further comprising extracting data rate information in congestion control mode by a mobile station.

20. (Original) The method of Claim 17, wherein if the numbers of the members of the reduced active set is equal to one, transmitting reverse link channel data rate control information in a explicit control mode.

21. (Original) The method of Claim 20, further comprising extracting data rate information in explicit mode by a mobile station.

22. (Currently Amended) A system for setting a reverse link channel data rate through use of an active set and a reduced active set, comprising:

at least one base transceiver station (BTS); and

a base station controller (BSC) coupled to each of the at least one BTSs, the BSC configured to generate the reduced active set, wherein the BSC is further configured to send indicia of the reduced active set to at least one Base Transceiver Station (BTS) and wherein each BTS of the reduced active set transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS.

23. (Original) The system of Claim 22, wherein the BTS is coupled to a BTS distribution logic.

24. (Currently Amended) A computer program product for dynamically switching between explicit reverse link channel data rate control and reverse link channel data rate congestion control, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer code for generating a reduced active set;

computer code for transmitting indicia of the reduced active set to an MS; and

if the number of members of the reduced active set is greater than one, computer code for transmitting reverse link channel data rate control information in congestion control mode from each member of the reduced active set.

25. (Currently Amended) A processor for dynamically switching between explicit reverse link channel data rate control and reverse link channel data rate congestion control, the processor including a computer program comprising:

computer code for generating a reduced active set;

computer code for transmitting indicia of the reduced active set to an MS; and

if the number of members of the reduced active set is greater than one, computer code for transmitting reverse link channel data rate control information in congestion control mode from each member of the reduced active set.

26. (Currently Amended) A system for dynamically switching between explicit reverse link channel data rate control and reverse link channel data rate congestion control, comprising:

means for generating a reduced active set;

means for transmitting indicia of the reduced active set to an MS; and

if the number of members of the reduced active set is greater than one, means for transmitting reverse link channel data rate control information in congestion control mode from each member of the reduced active set.